IFPS17.3 (Alpha)
!!!OB4.2 OR HIGHER WFOs ONLY!!!
Installation Instructions
Wednesday, April 06, 2005

Installation Instructions for IFPS17.3

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PART 0: Prerequisite

Part 0 represents the portion of the IFPS17.3 install that can be done/verified prior to actually starting the install. Please read over this section and complete the items listed below. You should not continue with the IFPS17.3 install until all of these items have been satisfied.

1. **AWIPS Version Installed**
    a. At least AWIPS **OB4.2** and exactly **IFPS16.2 <u>MUST</u>** be installed. On ds1 you may perform the following two (2) steps as any user (e.g., awipsusr, ifps, etc.)
        (1) To determine AWIPS release currently on your system, type the following command on any host:
            > `cat /awips/Release_ID`

            If the result does not match at least OB4.2, then you will need to install on the PX Machine. If there are any questions, then before continuing with the IFPS17.3 install, please contact Robert (Bob) Rood at (301) 713-0211 x 177.
        (2) To determine the IFPS release currently on your system, type the following command on any host:
            >`cat /awips/IFPS_Release_ID`

            If the result does not match exactly IFPS16.2, then please install IFPS16.2, before continuing with the IFPS17.3 install.

2. Important Note: **Backup (i.e., make copies of) Important IFPS Files**
    a. See Attachment 1 for the list of data files, scripts, and database tables that are replaced or merged during the IFPS17.3 upgrade.
    b. Key files that MDL suggests should be backed up prior to starting the IFPS17.3 upgrade appear below. Please note that these files should be owned by user ifps, not root or awipsusr.
        (1) Data files and Scripts
            1. `/awips/adapt/ifps/localbin/ifps-ccc.env`

3. **Warning:** The contents of /awips/GFESuite on DX and LX workstations will be populated with baseline GFESuite software. SITE and User configurations in /etc/SITE and data/databases will be preserved, but changes made elsewhere may not be preserved. **Please make backup copies of any site-created directories/files, or temporarily save them off to another location.**

    Also, /awips/ifps/primary and /awips/ifps/svcbu directories on the LX workstations will be wiped out and replaced with IFPS17.3 software from dx2. If you have any local software under /awips/ifps/primary or /awips/ifps/svcbu that does NOT exist on dx2, **please make backup copies of these files or temporarily save them off to another location.**

4. <u>Warning:</u> **There is a risk of '/awips/GFESuite' getting erased on RPP machines.**
    If you have any RPP machines attached to AWIPS network, please do the following steps to

ensure that the contents of /awips/GFESuite directory and/or other important files are not erased from your RPP machine(s).

a. As user root on dx2, source /etc/rc.config.d/AWIPS file and look up $LX_WOKRSTATIONS variable.
  (1) > . /etc/rc.config.d/AWIPS
  (2) > echo $LX_WORKSTATIONS
  If your RPP machine(s) is listed under $LX_WORKSTATIONS, please edit the /etc/rc.config.d/AWIPS file, and modify the "export LX_WORKSTATIONS=" line, and delete your RPP machine from that list. The install script uses this variable to perform all install/upgrade on LX machines.

PART 1: Pre-install Preparations

Part 1 represents the steps necessary to prepare the system for the IFPS17.3 install. Part 1 through Part 3 within the install instructions need to be completed on the same day. It is estimated that the Part 1 and Part 2 will take approximately 90 minutes to complete. The time required for Part 3 depends on the amount of time it will take your site to verify the IFPS17.3 upgrade.

NOTE: During this installation, IFPS updates the contents of '/awips/GFESuite', '/awips/ifps/', and '/awips/adapt/ifps/bin' on all DX and LX machines. Therefore, please save off any locally created software that you might have under these directories to another location. This installation attempts to preserve any locally created software, however no guarantee is made regarding the preservation of locally created software.

Please follow the directions listed below.

1. **Be sure to look for addenda to the IFPS17.3 Install Instructions**
    a. *Before starting with the IFPS17.3 install, please review any updated Install Instructions and/or Lessons Learned at the following URL:*

    http://www.nws.noaa.gov/mdl/icwf/IFPS17.3Full/IFPS17.3.html#LessonsLearned

    The IFPS17.3 web page includes a number of other hypertext links including a link to the IFPS17 User's Guide.

2. **IFPS17.3 Install Space**
    a. The chart in **Attachment 2** indicates the amount of space needed in each of the partitions for the specified host. If there is not enough space available, the install will stop in order to allow the IFPS-FP to free up space in the specified partition. The install can then be re-run. To save time during the installation, this chart may be used as a pre-install check of available space. All sizes are in kb.
    b. If you need to clear up space under /data/adapt partition, you can safely delete some of the old IFPS and GFESuite backup files located under /data/adapt/ifps/backup directory. Backup files from IFPS15 or earlier (such as GFESuite15.tgz) can safely be removed.

3. **Partition permissions**
    a. Make sure your critical partitions have correct permissions and ownership.
        i. On all DXs and LXs, cd to /awips/ and check that permission to ifps and GFESuite directories are correct.
            (1) `>cd /awips`
            (2) `>ls -al`

Sample:
```
drwxrwxr-x   4   ifps   fxalpha   4096   Aug 27 15:02 GFESuite
drwxrwxrwx   4   ifps   fxalpha   4096   Aug 27 15:05 ifps
```
    ii.   If the permissions and ownerships are not the same as shown above, change them as root.

        (1)   >su root
        (2)   >chmod 775 /awips/GFESuite
        (3)   >chown ifps:fxalpha /awips/GFESuite
        (4)   >chmod 777 /awips/ifps
        (5)   >chown ifps:fxalpha /awips/ifps

4.   **IMPORTANT:** **ssh ability between dx2 and all hosts**

    a.   Please make sure that you can ssh from dx2 to all other DXs (including dx2 itself) and all the LXs. This is important because IFPS install scripts will need to connect to other machines to install software and without proper permissions, it will fail. Make sure to monitor the output of the command below, looking for any problems.

        i.   **At an OB4.2 site:** Run the following command as user **'root'**, on **px1** (**NOTE:** This command must be run on **px1** irregardless of the install machine (dx2):

            > /home/awipsadm/ssh/setupSSHkeys.sh

        ii.   **At an OB5 site or later:** Run the following command as user **'root'**, on **px1** (**NOTE:** This command must be run on **px1** irregardless of the install machine (dx2):

            > /home/awipsadm/ssh/VerifySSHkeys.sh

IMPORTANT: If you have any questions or notice any problems while running this script, please contact NCF before continuing with the install. It is imperative that ssh functionality is tested before starting with the install.

5.   **Read permissions on files residing under ~ifps/localbin, ~ifps/data and ~ifps/Xdefaults.**

    a.   Since the install of IFPS17.3 will be started from dx2, it is necessary to make sure directories under /awips/adapt/ifps have correct permissions. This is necessary so that install scripts can backup appropriate files.

    b.   Please make sure that all the files residing under /awips/adapt/ifps/localbin, /awips/adapt/ifps/data and /awips/adapt/ifps/Xdefaults have world readable permission.

    c.   If you are unsure about whether files contain proper permissions, you can issue the following commands as user root on ds1:

        i.   > cd /awips/adapt/ifps
        ii.   > chmod -R 777 localbin Xdefaults data

6.   **Change the permission of /data/adapt/ifps/backup**.

    a.   Login to ds1 as user ifps
    b.   Issue the following commands to change permissions

        i.   `> chmod 777 /data/adapt/ifps`
        ii.   `> chmod 777 /data/adapt/ifps/backup`

7. **Verify your text forecast product PILs in the afos2awips.txt file**:
   a. Download the checkPils application on any Linux box (lx, px, dx) from: http://www-md.fsl.noaa.gov/eft/AWIPS/16k
   b. Run the following commands from the directory where you saved the file:
      i. >tar xvf checkPIL.tar
      ii. >python checkPIL CCC   (where CCC = WFO ID)
   c. Verify the list of reported PILs. In the afos2awips.txt file, remove any obsolete PILs, add any missing PILs, and add a space after any 8-character PILs so that they line up properly with the other PILs in the file.

8. **Remove any <u>files</u> from /awips/GFESuite/primary/data/vtec.**
   a. On dx2, as user ifps:
      >rm -fr /awips/GFESuite/primary/data/vtec/*

PART 2: Install IFPS17.3

Part 2 represents the steps necessary to install IFPS17.3. **Part 1 through Part 3 within the install instructions need to be completed on the same day.** MDL estimates Part 2 will take 80 minutes to complete. The time required for Part 3 depends on the amount of time it will take your site to verify the IFPS17.3 install.

Please follow the directions listed below.

1.   **Notify the NCF**
        a.   Before starting the IFPS17.3 installation, please open a trouble ticket with the NCF. Should you require any assistance with your installation of IFPS, a trouble ticket will already be opened.
        b.   ***During normal Eastern Time business hours, if you have any problems with your IFPS installation** or have questions about anything related to the **installation** process, then please contact:*
                • Carl McCalla, Sr. at (301) 713-1065 x169 or
                • Iris Boon at (301) 713-1774 x183
        c.   If you encounter any operational problems with IFPS, after successfully installing and after closing your installation Trouble Ticket, then, as usual, contact the NCF at (301) 713 -9344.

2.   **Ensure System is running**
        a.   Log into a workstation as root, then ssh to the ds
                1.   `> ssh ds1`
        b.   Use the following command to verify that Informix is up and running correctly.
                `> onstat -g dri`
                1.   If you get a response this means that the Informix database is running.
                2.   Using the output from the command above, verify that under the ***Data Replication*** heading, the type is primary and the state is on as indicated below.

        Informix dynamic server 7.31.UC2 – On-Line (Prim)–up 012319 – 168592 kbytes

        Data Replication:

Type	*state*	*paired serve*	*const dr ckpt*	*id/pg*
primary	*on*	*ONLINE_REP 126615/14*	*28*	

        DR interval 30
        DR interval 30
        DR interval 30
        DR auto 0
        DRLOST FOUND /opt/informix/etc/.dr.lostfound

> **NOTE:** If (1) or (2) above are not true, you have a problem and need to start the Informix database before you proceed. Call the NCF for assistance.

c. Verify that the DX, DS, or AS are not currently failed over. You will **not** be able to complete this install, if one of the DX, DS, or the AS servers is failed over.

- As user root, to check whether or not DS/AS are in failover mode, use the cmviewcl command.

- As user root, to check whether or not DXs are in failover mode, use the hb_stat command.

Sample Output of cmviewcl:
```
CLUSTER     STATUS
awips       up

NODE        STATUS      STATE
as1-ggw     up          running

  PACKAGE     STATUS      STATE     PKG_SWITCH  NODE
  as1swap     up          running   enabled     as1-ggw

 NODE        STATUS      STATE
 as2-ggw     up          running

  PACKAGE     STATUS      STATE     PKG_SWITCH  NODE
  as2swap     up          running   enabled     as2-ggw

 NODE        STATUS      STATE
 ds1-ggw     up          running

  PACKAGE     STATUS      STATE     PKG_SWITCH  NODE
  dsswap      up          running   enabled     ds1-ggw

 NODE        STATUS      STATE
 ds2-ggw     up          running
```

Sample Output of hb_stat:

```
Heartbeat Status Monitor                    Feb 04 20:18:04

==================== M e m b e r   S t a t u s ====================

 Member        Status     IP address
 -------------- ---------- ----------------
```

```
dx1-nhda     Up      165.92.21.3
dx2-nhda     Up      165.92.21.4

===================== S e r v i c e   S t a t u s =====================

Service      IPaddr        Cronfile          Owner      Start Time
------------- -------------- --------------    ---------- -------------------
dx1apps      165.92.21.65  dx1cron,SITEdx1 dx1-nhda  2005-02-01 20:15:45
dx2apps      165.92.21.66  dx2cron,SITEdx2 dx2-nhda  2005-02-01 20:15:45
```

    d.   Verify that the site is not in service backup mode.
(To verify site is not in service backup mode, check that
/awips/adapt/ifps/bin/.cccsvcbuMode (where ccc=wfo id) file does not exist. If this file
exists, please run service backup cleanup script from the Service Backup GUI to exit
service backup mode).

3.   **Install IFPS17**

    a.   Verify that IFPS and WWA are **NOT** running on any workstation in the office. This
includes HP as well as Linux workstations.

    b.   Ensure the ifpServer and ifpServerWatcher processes **are running on dx2**. You can use
this command to make this determination:

> ps -fu ifps

If either is not running, then **as user ifps**, perform these two commands, substituting your
site id for the ccc':
> cd /awips/ifps/primary/bin
> start_ifps_servers ccc

    c.   Install IFPS17.3.
         1.   Insert the CD labeled "IFPS17.3 - Full" into the CD drive on dx2
         2.   **NOTE:** First, close out any terminal you may have logged into as user ifps. If
you are on one of the workstations, then open a new terminal as user **root** and
then ssh into **dx2**. Please be sure to be user root **before** ssh'ing from the
workstation to dx2.
         3.   Start a window to enter commands and make sure you are **user root**. You may
choose to open a second window in case you need to enter other commands.
         4.   Mount the CD drive on **dx2** as user **root**,
             > mount /mnt/cdrom1
            This will mount the IFPS17.3 CD in /mnt/cdrom1 directory.
         5.   In the same window, start the script to log install progress (**VERY
IMPORTANT**)
             Verify the log directory exists:
             > ssh ds1 -n "ls -l /data/adapt/"
             If directory "inslogs" is not shown, create it as follows:
             > ssh ds1 -n "mkdir /data/adapt/inslogs"
             > ssh ds1 -n "chmod 777 /data/adapt/inslogs"

Now create the log file:
> ssh ds1 -n "touch /data/adapt/inslogs/installIFPS17.3.out"
> ssh ds1 -n "chmod 777 /data/adapt/inslogs/installIFPS17.3.out"
> script -a /data/adapt/inslogs/installIFPS17.3.out

6. In the same window, change to the "/mnt/cdrom1/DX" directory and run "./installIFPS". Remember this command needs to be executed as **root** on the **dx2**. This script needs to run to completion (i.e., the command line prompt returns). Do not <cntrl>C out of this script unless you are directed to do so by NCF or MDL personnel!!!
> cd /mnt/cdrom1/DX
> ./installIFPS

a. There are a few error checks that may appear during the IFPS17.3 install. These error checks will stop the install until the problem is resolved.
   i. The first few checks verifies that there is enough space to install IFPS17.3 on all needed partitions. If there is not enough space, then the install will stop while this area is cleaned up. Once the directory has been cleaned, you can start the install by issuing the above command again.
   ii. The second check verifies that no sessions are connected to the ifps_ccc and wwa_ccc databases. If this check determines that there is a session connected to this database, it will try to kill the connected processes. But as a precaution, you should always make sure that you are not running any IFPS or WWA processes on any of the HP or Linux workstations.
   iii. The install script will also check if all the IFPS services are added correctly. If they are not, install script will fail and ask you to correct it.

7. When the command line prompt is returned, the install script has finished. (The last few lines should indicate that install has finished.) Please finish the installation by performing the following step(s).

   No additional steps at this time.

8. Type in 'exit' in the same window you issued the above commands to stop the script:

   > exit

4. **Review your IFPS17.3 install log**
>cd /data/adapt/inslogs

>more installIFPS17.3.out

Look for any errors in the log file. **Please be aware that some errors may be safely ignored**. Examples of such errors are listed below.

a. bash: /root/.bashrc: Permission denied

b.   mv: setting permissions for
      `/data/adapt/ifps/backup/ifps_okx.tgz': Operation not permitted
c.   /awips/ifps/primary/bin/sqlcmd: No such file or directory
d.   line 163: 9767 Segmentation fault   read_instructions
      $update_flag -input $ins_files
e.   ls: *ccc: No such file or directory
f.   ls: ifps-*: No such file or directory
g.   shell-init: could not get current directory:
      getcwd:cannot access parent directories:No such file or directory

**<u>Please click on the link below and take a look at an
example of a successful IFPS17.3 install log file. The
instances in that sample log file where instructions
indicate the NCF should be contacted should be ignored
and if you encounter similar instances in your log file,
they should also be ignored.</u>**

http://www.nws.noaa.gov/mdl/icwf/IFPS17.3Full/installIFPS17.3.DX.out

If you have a questions about anything related to the install process,
please check first with your <u>IFPS Focal Point</u>. In particular, most
instances of the ifpServer not starting cleanly can be traced to a
localConfig.py file that is not compatible with the new IFPS release. In
those cases, the IFPS Focal Point can generally quickly start the
ifpServer after updating your localConfig.py file.

If the IFPS Focal Point is unable to resolve the problems, please call the
NCF or one of the members of the Customer Support Team in
Attachment 4 for assistance. Also take a look at the Lessons Learned
section of the IFPS17.3 web page at:

http://www.nws.noaa.gov/mdl/icwf/IFPS17.3Full/IFPS17.3.html#LessonsLearned

When the install is completed, please call the NCF and close the trouble
ticket you opened to begin this process.

5.   Unmount & remove the IFPS17.3 CD
                     > cd
                     > umount /mnt/cdrom1

Take the IFPS17.3 CD out of the drive by pressing the eject button on the CD-ROM drive.

PART 3: Post-Install Instructions for IFPS17.3

Part 3 represents the steps necessary to verify the IFPS17.3 install. These steps are not comprehensive, but are enough to verify that the basic system functionality is up and running. This part of the install instructions includes a list of items that MDL/FSL recommend be completed immediately after the IFPS17.3 install. This list is meant to focus the IFPS Focal Point on particular pieces of the software that were changed during the IFPS17.3 install. Although MDL/FSL attempts not to overwrite the local site's configuration of IFPS, it is, nevertheless, possible for this to occur. This part of the install instructions should lead the IFPS Focal Point to verify whether or not the site configuration was lost. This section will closely parallel the information listed in Part 0. If the site performed the necessary backup of the data referenced in Part 0, then the verification and any necessary updates should go smoothly at this time. The last part of this section includes a list of items that will need to be configured. Note, the site may elect to perform this configuration at a later time.

Please follow the directions listed below.
1.   **Verify System Functionality**
        a.   Verify that the IFPS servers started correctly

                        (1)   On dx2 as ifps
                                i.   Check for the IFPS Servers (ifpServer, and ifpServerWatcher)
                                        `>ps -ewf | grep ifps`
        Sample:
        ifps   29463   1 0 Sep23 ?   01:13:27 /awips/GFESuite/primary/bin/run/ifpServer -D ...
        ifps   29840   1 0 Sep23 ?   00:00:17 ifpServerWatcher -s lwx -P 98000000 -H dx2f -T ...
                                ii.   If any of the above processes are not listed, then start the
                                        server(s)
                                        **NOTE: You should see ifpServer and ifpServerWatcher
                                        processes running.**

                                        `>cd /awips/ifps/primary/bin`
                                        `>./start_ifps_servers ccc`
                                                where ccc is the 3-letter site identifier

        b.   Verify that the mexwxMonitor started correctly

                        (1)   On dx2 as ifps
                                i.   Check for mexwxMonitor
                                        `>ps -ewf | grep mexwxMonitor`
        Sample:
        040 S ifps   31749   1 0 75 0   - 655 schedu Nov24 ?   00:00:02
        /awips/ifps/primary/bin/mexwxMonitor /awips/adapt/ifps/localbin/ifps-aly.env.
                                ii.   If mexwxMonitor is not listed, then start it

                                        `>cd /awips/ifps/primary/bin`
                                        `>./start_mexwxMonitor.sh`
`/awips/adapt/ifps/localbin/ifps-ccc.env`
                                                where ccc is the 3-letter site identifier

c. Verify that the IFPS cron files are running

    (1) On ds1 as ifps
        i. Check for the IFPS cron

```
>crontab -l
```

        ii. If the cron is not listed, then start it

```
            >cd /awips/adapt/ifps/crontab
>crontab ifps-ccc.crontab
```

                where ccc is the 3-letter site identification

    (2) On dx2 as ifps
        i. Check for the IFPS cron

```
>grep ifps /etc/cron.d/dx2cron
```

        ii. If no ifps processes are listed, then configure and register it as user root

```
>su - root
>/awips/ops/bin/hb_config_crontabs
>/awips/ops/bin/hb_halt dx2apps
>/awips/ops/bin/hb_run dx2apps
```

3. New Functionality that could be Configured within IFPS

    d. Please refer to Section #1 of the IFPS17.3 Release Notes for more details of new functionality added within IFPS17.3. The URL is:

        http://www.nws.noaa.gov/mdl/icwf/IFPS17/Section1IFPS17.3RlseNotes.pdf

4. Export Configuration Data

    a. After successfully **installing**, **testing**, and **configuring** IFPS17.3, it is important that you export your site's configuration data to the NDFD central server. Having your site's latest configuration data available on the NDFD central server will greatly facilitate service backup should your site require it.

    b. **NOTE:** It is advised that IFPS17.3 WFOs SHOULD NOT perform Service Backup for IFPS16.2 WFOs. Similarly, IFPS16.2 WFOs should not perform Service Backup for IFPS17.3 WFOs. MDL and FSL both strongly recommend sticking with 17/17 and 16/16 backups.17 backing up 16, and vice versa, might work, but we can't guarantee it.

    c. For more information related to exporting your site's configuration data, please visit the following references in the IFPS17 Users Guide:

        http://www.nws.noaa.gov/mdl/icwf/user_guide_ifps17/func/svc_backup_func.htm#Initiating

        http://www.nws.noaa.gov/mdl/icwf/user_guide_ifps17/tech/svc_backup_tech.htm#ConfigDataExp

NOTE: If you get an error message indicating your export file is too big, then you may safely remove the

following files to create more available space:

- /awips/adapt/ifps/data/*.bp
- /awips/adapt/ifps/data/*.shp
- /awips/adapt/ifps/data/*.shx

Part 4 represents the steps necessary to deinstall (if necessary) IFPS17.3. The deinstall is a radical step and should be considered only as a **last resort** to get the site back up and running with IFPS. As a result, any deinstall of IFPS17.3 should be carefully coordinated between the site, regional headquarters, Office of Science and Technology, MDL, FSL, and OCCWS.

> **NOTE:** Any configuration completed since the IFPS17.3 install will be lost upon completing the deinstall. The system will be returned to the state just prior to the IFPS17.3 install. All forecast digital data will be lost and will need to be recreated unless the following steps are followed.

Please follow the directions listed below.

1.   **Notify the NCF**
     a.   Before starting the IFPS17.3 de-install, please open a trouble ticket with the NCF. This will alert MDL that you are about to begin your IFPS de-install. Should you require any assistance with the de-install, a trouble ticket will already be opened.

2.   **Restore IFPS to IFPS16.2**
     a.   Verify that IFPS and WWA are **NOT** running on any workstation in the office. This includes HP as well as Linux workstations.
     e.   Verify that /awips/IFPS_Release_ID indicates that the current version of IFPS is 17.3. If it is not, stop.
     f.   Deinstall IFPS17.3.
          (1)   **Save the Forecast data.** During the deinstall of IFPS17.3, the forecast grids will be lost. In order to prevent this data loss the grids must be manually saved off and then restored when the deinstallation has finished.
                i.   Log into **dx2** as user **ifps**. Check to see that the ifpsServer and ifpServerWatcher processes are running by typing this command:
                     ```
                     > ps -fu ifps
                     ```

                     If either process is not running, enter these commands, substituting your site id for 'ccc':
                     ```
                     > cd /awips/ifps/primary/bin
                     > start_ifps_servers ccc
                     ```
                     If the processes are running proceed to step ii.

                ii.   ```
                      > cd /awips/GFESuite/primary/bin
                      ```

                iii.  Substitute your site id (in upper case) for 'CCC' and note that there are two (2) underscores following 'GRID':

          ```
          > ./ifpnetCDF -o   /data/adapt/SaveFcstDB.cdf \
          -h dx2f -r 98000000 -d CCC_GRID__Fcst_00000000_0000
          ```

iv.   This will produce a file named SaveFcstDB.cdf in your
        /awips/GFESuite directory. Verify the file is there, and then exit
        dx2.

(2)   If not already inserted, load the CD labeled "IFPS17.3 - Full" into the
        CD drive on dx2
(3)   Log into a workstation as root, then ssh into the dx2
        `>ssh dx2`
(4)   Start two windows. One to run the commands and the other to stop the
        script files.
(5)   In the first window, if not already mounted, mount the CD drive
        `>mount /mnt/cdrom1`
        `>cd /mnt/cdrom1/DX`
(6)   In the first window, start the script to log install progress
        >ssh ds1 -n "touch /data/adapt/inslogs/deinstallIFPS17.3.out"
        >ssh ds1 -n "chmod 777 /data/adapt/inslogs/deinstallIFPS17.3.out"
        >script -a /data/adapt/inslogs/deinstallIFPS17.3.out
(7)   In the first window, run the installIFPS script with a deinstall option (the
        script may take a second or two, before it sends information to the
        terminal screen)
        `>./installIFPS –d deinstall`
        The deinstallation will now start. It should inform you of what is doing
        by echoing statements to the screen. There may be several steps that
        may take awhile without displaying any output. Please be patient, and
        wait for the script to continue.
(8)   When the first window returns to the command prompt, the deinstallation
        has finished. Stop install log using this command:
        `>exit`

        `(It will notify you that script has ended with a`
        `date/time stamp)`

(9)   In the second window, review the deinstall IFPS17.3 log
        `>cd /data/adapt/inslogs`
        `>more deinstallIFPS17.3.out`
        Look for any errors in the log file. If you have questions about anything
        related to the de-install process, call the NCF for assistance. When the
        de-install is completed, please call the NCF and close the trouble ticket
        you opened to begin this process.
(10)   **Restore the forecast data.**
        i.   Log into **dx2** as user **ifps**. Ensure the ifpServer and
                ifpServerWatcher processes are running by typing.
                > ps -fu ifps

                If either process is not running perform these two commands,
                substituting your site id for the 'ccc':
                > `cd /awips/ifps/primary/bin`
                > `start_ifps_servers ccc`

ii. $>$ `cd /awips/GFESuite/primary/bin`

Substitue your site's id (upper case) for the 'CCC' and note that there are two (2) underscores in the following command:

```
> ./iscMosaic -h lx1 -r 98000000 -d \
CCC_GRID__Fcst_00000000_0000 -z -n -f \
/data/adapt/SaveFcstDB.cdf
```

iii.   Move the SaveFcstDB.cdf file to the backup directory:
   $>$ `cd /data/adapt`
   $>$ `mv SaveFcstDB.cdf \`
   `/data/adapt/ifps/backup/`

(11)   Unmount & remove the IFPS17.3 CD
   $>$ cd
   $>$ umount /mnt/cdrom1
   Take the IFPS17.3 CD out of the drive by pressing the eject button on the CD-ROM drive.

Attachment 1: New/Merge/Replace File List for IFPS17

The table below tracks changes in the IFPS data files and database tables associated with the transition from IFPS16.2 to IFPS17

The following **key** is used in the table.

Merge   Attempt to preserve edited changes to this file/database table while providing any new information needed for IFPS to run in the IFPS17 environment. The IFP focal point should **back these files up** and **confirm that no site changes were lost during the IFPS17 upgrade.**

Replace/Update   This file/database table must be completely replaced in order for IFPS to run in the IFPS17 environment. The IFP focal point should **back these files up** and **be prepared to merge his/her changes into the file once IFPS17 has been installed.**

Delete   This file/database table was removed during the IFPS17 install.

New   New files/database tables required for IFPS to run in the IFPS17 environment. There is no additional work required. The IFP focal point may have to customize these files, after IFPS17.3 is installed in order for a particular application to work correctly. For IFPS17.3 details and links to IFPS17.3 Release Notes and the IFPS17 User's Guide, go to:

http://www.nws.noaa.gov/mdl/icwf/IFPS17.3Full/IFPS17.3.html

If a particular file/database table is not mentioned in the report below, assume that no changes are occurring during the IFPS17.3 install.

File/Database Table	Use Key Above
~ifps/Xdefaults No changes	N/A

File/Database Table	Use Key Above
~ifps/crontab (/awips/adapt/ifps) ifps-ccc.crontab ifps-purge.crontab /awips/ifps/primary ifps-combined.crontab ifps-grdexport.crontab ifps-mosingest.crontab	 New New New New New
~ifps/localbin ifps-ccc.env	 Merge
~ifps/data No Changes	 N/A
ifps_ccc database No Changes	N/A

File/Database Table	Use Key Above
~ifps/help/svcbu	
banner_exprtbkstieGrdMode.gif	New
banner_exprtbksiteGrdMode.jpg	Delete
banner_exprtbksiteGrdToCSMode.gif	New
banner_exprtbksiteGrdToCSMode.jpg	Delete
banner_exprtGrdMode.gif	New
banner_exprtGrdMode.jpg	Delete
banner_exprtMode.gif	New
banner_exprtMode.jpg	Delete
banner_ghgmode.gif	New
banner_imprtGrdMode.gif	New
banner_imprtGrdMode.jpg	Delete
banner_imprtMode.gif	New
banner_imprtMode.jpg	Delete
banner_no_backup.gif	New
banner_no_backup.jpg	Delete
banner_svcbuMode.gif	New
banner_svcbuMode.jpg	Delete
banner_waitMode.gif	New
banner_waitMode.jpg	Delete
choose_domain.jpg	New
choose_domain_multi1.jpg	New
choose_domain_multi2.jpg	New
clean_up.gif	New
do_not_cancel.gif	New
failed_site.jpg	New
gfe_startup.gif	New
multi_exprtbksiteGrdMode.gif	New
multi_exprtbksiteGrdMode.jpg	Delete
multi_exprtbksiteGrdToCSMode.gif	New
multi_exprtbksiteGrdToCSMode.jpg	Delete
multi_exprtGrdMode.gif	New
multi_exprtGrdMode.jpg	Delete
multi_exprtMode.gif	New
multi_exprtMode.jpg	Delete
multi_ghgmode.gif	New
multi_imprtGrdMode.gif	New
multi_imprtGrdMode.jpg	Delete
multi_imprtMode.gif	New
multi_imprtMode.jpg	Delete
multi_no_backup.gif	New
multi_no_backup.jpg	Delete
multi_svcbuMode.gif	New
multi_svcbuMode.jpg	Delete

File/Database Table	Use Key Above
multi_waitMode.gif	New
multi_waitMode.jpg	Delete
option_both.jpg	New
option_gfe.jpg	New
option_import_gfe.jpg	New
option_import.jfg	New
option_import_no_gfe.jpg	New
option_none.jpg	New
svcbu_faq.html	New
svcbu_help.html	New
svcbu_instructions.html	New
svcbu_multidom.html	New
xmessage_faq_01.jpg	New
xmessage_faq_02.jpg	New
xmessage_faq_03.jpg	New
xmessage_faq_04.jpg	New
xmessage_faq_05.jpg	New
xmessage_faq_06.jpg	New
xmessage_faq_07.jpg	New
xmessage_faq_08.jpg	New
xmessage_faq_09.jpg	New
xmessage_faq_10.jpg	New
xmessage_faq_11.jpg	New
xmessage_faq_12.jpg	New
xmessage_faq_13.jpg	New
xmessage_faq_14.jpg	New
xmessage_faq_15.jpg	New
xmessage_faq_16.jpg	New
xmessage_faq_17.jpg	New
xmessage_faq_18.jpg	New
xmessage_faq_19.jpg	New
xmessage_faq_20.jpg	New
xmessage_faq_21.jpg	New
xmessage_faq_22.jpg	New
xmessage_faq_23.jpg	New
xmessage_faq_24.jpg	New
xmessage_faq_25.jpg	New
xmessage_faq_26.jpg	New
xmessage_faq_27.jpg	New
xmessage_faq_28.jpg	New
xmessage_faq_29.jpg	New
xmessage_faq_30.jpg	New
xmessage_faq_31.jpg	New
xmessage_faq_32.jpg	New

File/Database Table	Use Key Above
xmessage_faq_33.jpg	New
xmessage_faq_34.jpg	New
xmessage_faq_35.jpg	New
xmessage_faq_36.jpg	New
xmessage_faq_37.jpg	New
xmessage_faq_38.jpg	New
xmessage_faq_39.jpg	New
xmessage_faq_40.jpg	New
xmessage_faq_41.jpg	New
xmessage_faq_42.jpg	New
xmessage_faq_43.jpg	New
xmessage_faq_44.jpg	New
xmessage_faq_45.jpg	New
xmessage_faq_46.jpg	New
xmessage_faq_47.jpg	New
xmessage_faq_48.jpg	New
xmessage_faq_49.jpg	New
xmessage_faq_50.jpg	New
xmessage_faq_51.jpg	New
xmessage_faq_52.jpg	New
xmessage_faq_53.jpg	New
xmessage_faq_54.jpg	New
xmessage_faq_55.jpg	New
xmessage_faq_56.jpg	New
xmessage_faq_57.jpg	New
xmessage_faq_58.jpg	New
xmessage_faq_59.jpg	New
xmessage_faq_60.jpg	New
xmessage_faq_61.jpg	New
xmessage_faq_62.jpg	New
xmessage_faq_63.jpg	New
xmessage_faq_64.jpg	New
xmessage_faq_65.jpg	New
xmessage_faq_66.jpg	New
xmessage_faq_67.jpg	New
xmessage_faq_68.jpg	New
xmessage_faq_69.jpg	New
xmessage_faq_70.jpg	New
xmessage_faq_71.jpg	New
xmessage_faq_72.jpg	New

File/Database Table	Use Key Above
xmessage_faq_73.jpg	New
xmessage_faq_74.jpg	New
xmessage_faq_75.jpg	New
xmessage_faq_76.jpg	New
xmessage_faq_77.jpg	New
xmessage_faq_78.jpg	New
xmessage_faq_79.jpg	New
xmessage_faq_80.jpg	New
xmessage_faq_81.jpg	New
xmessage_faq_82.jpg	New
xmessage_inst_01.jpg	New
xmessage_inst_02.jpg	New
xmessage_inst_03.jpg	New
xmessage_inst_04.jpg	New
xmessage_multidom_01.jpg	New
xmessage_multidom_02.jpg	New
xmessage_multidom_03.jpg	New
xmessage_multidom_04.jpg	New
xmessage_multidom_05.jpg	New
xmessage_multidom_06.jpg	New

The following are some of the exexutables and scripts in /awips/adapt/ifps/bin/hp and /awips/ifps/primary/bin that have changed with the IFPS17.3 install. If the IFP focal point has made any adjustments to these within /awips/adapt/ifps/localbin, they will need to be **merged.**

- Under /awips/adapt/ifps/bin/hp:

  $ ndfd_mhs_ds.sh

- Under /awips/ifps/primary/bin (NOTE: This directory is NOT mounted, so any changes will need to be made on each DX and LX host):

  $ IFPS_DXmove.sh
  $ MOSInterp
  $ addmos_stns
  $ avn_unldr
  $ bpfextract
  $ check_svcbu.bat
  $ choose_domai
  $ cleanup_svbk
  $ config_cntrl_const
  $ config_forecasters
  $ config_geo

$ config_ifps
$ do_imprt_grd_proc
$ export_bksite_grid_data
$ export_bksite_grid_data_to_central_server
$ export_grid_data.AK
$ export_grid_data
$ export_localbin_for_svcbkup
$ failed_site.tcl
$ getwwalist (deleted)
$ gform
$ ghg_start.sh
$ ghg_stop.sh
$ ifpServerWatcher
$ import_GFEconfig_for_svcbkup
$ import_config_and_grids.bat
$ import_datadir_for_svcbkup
$ import_files_for_svcbkup
$ import_grid_data
$ import_localbin_for_svcbkup
$ import_svc_backup_data.bat
$ mexwx
$ mexwxMonitor
$ ndfd_mhs.sh
$ ndfd_mhs_px.sh (deleted)
$ prepare_grib2
$ proc_imprt_config_data
$ proc_imprt_grd_data
$ process_import_svc_backup_data
$ process_export_svc_backup_data
$ putwwa (deleted)
$ quick_start.bat
$ query_options.tcl
$ retrieve_svc_backup_dat
$ service_backup.bat
$ service_backup.tcl
$ start_imprt_grd
$ start_PX_ifps_server
$ start_PX_ifps_servers_for_svcbkup
$ stop_PX_ifps_server
$ stop_PX_ifps_servers_for_svcbkup
$ wwaList.py (deleted)

Attachment 2: IFPS17.3 Install Space

NOTE: The install space requirements for IFPS17.3 are outlined in the table below. All sizes are in kilobytes (KB). If you do not have sufficient space in any of the partitions listed below, please contact Carl McCalla, Sr. at (301) 713-1065 x169 or Iris Boon at (301) 713-1774 x183 for assistance in identifying files that may be safely deleted.

If you need to clear up space under /data/adapt partition, you can safely delete some of the old IFPS and GFESuite backup files located under /data/adapt/ifps/backup directory. Backup files from IFPS15 or earlier (such as GFESuite15.tgz, ifps_R15_bin.tar.gz) can safely be removed.

Sites without Multi-domain configuration:

	Host			
Partition	ds1	lx1..lx*n*	dx2	dx1
/awips/ifps	-	300,000	300,000	300,000
/awips/GFESuite*	-	1,500,000	1,500,000	-
/awips/adapt	80,000	-	-	-
/data/adapt	1,300,000	-	-	-

Sites with Multi-domain configuration:

	Host			
Partition	ds1	lx1..lx*n*	dx2 & px3	dx1 & px4
/awips/ifps	-	300,000	300,000	300,000
/awips/GFESuite*	-	1,500,000	1,500,000	-
/awips/adapt	80,000	-	-	-
/data/adapt	1,300,000	-	-	-

<u>Attachment 3: Sample IFPS Install and Deinstall Log Files</u>

Sample IFPS Install and Deinstall Log Files are available at the following URLs:

- http://www.nws.noaa.gov/mdl/icwf/IFPS17.3Full/installIFPS17.3.DX.out
- http://www.nws.noaa.gov/mdl/icwf/IFPS17.3Full/deinstallIFPS17.3.DX.out.pdf

Attachment 4: Customer Support Team (CST) Contact List

- Carl.McCalla@noaa.gov
  (301) 713-1065 x 169

- Iris.Boon@noaa.gov
  (301) 713-0224 x 145

- Paul.Hershberg@noaa.gov
  (301) 713-0056 x 181